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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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EXAMINER

ART UNIT	PAPER NUMBER
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DATE MAILED:

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No
09/158,982

Applicant(s)

Mullins et al.

Examiner

Ardin Marschel

Group Art Unit
1631



X Responsive to communication(s) filed on Jun 15, 2000

X This action is **FINAL**.

Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 35 C.D. 11, 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claim

X Claim(s) 1-24 is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

X Claim(s) 8 and 9 is/are allowed.

X Claim(s) 1-7 and 10-24 is/are rejected.

X Claim(s) 10 is/are objected to.

Claims _____ are subject to restriction or election requirement.

Application Papers

See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

The drawing(s) filed on _____ is/are objected to by the Examiner.

The proposed drawing correction, filed on _____ is ☐ approved ☒ disapproved.

The specification is objected to by the Examiner.

The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

All ☐ Some* ☐ None ☐ of the CERTIFIED copies of the priority documents have been received.

received in Application No. (Series Code/Serial Number) _____.

received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

Notice of References Cited, PTO-892

Information Disclosure Statement(s), PTO-1449, Paper No(s) _____

Interview Summary, PTO-413

Notice of Draftsperson's Patent Drawing Review, PTO-948

Notice of Informal Patent Application, PTO-152

— SEE OFFICE ACTION ON THE FOLLOWING PAGES —

The art unit designated for this application has changed. Applicants are hereby informed that future correspondence should be directed to Art Unit 1631.

Applicants' arguments, filed 6/15/96, have been fully considered but they are not deemed to be persuasive. Rejections and/or objections not reiterated from previous office actions are hereby withdrawn. The following rejections and/or objections are either reiterated or newly applied. They constitute the complete set presently being applied to the instant application.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 1-7 and 24 are rejected under 35 U.S.C. § 102(a) as being clearly anticipated by Lockhart et al. (Ref. A3).

This rejection is maintained as given in the previous Office action, mailed 12/15/99, and as necessitated by amendment regarding claim 24. Applicants argue that the reference lacks a determination of a first and a different second value for a first and second polynucleotide, respectively, and also a third measure of the quantity of the polynucleotide and that the reference array is an arbitrary thing. In response the arrays are

described in the abstract as being formed via in situ synthesis with photolithography and oligonucleotide chemistry to include a large number of specifically chosen oligonucleotides. The arrays are read out as described on page 1676 as previously stated in support of this rejection. Thus, the position coordinates for the array must not be arbitrary as argued by applicants. In fact the array data output would be useless if the oligonucleotides thereon were arbitrarily synthesized. This is not the case due to the data output from the arrays of the reference which given quantitation as previously noted. The first and second values as noted above are broadly cited in the instant claims such that positional values as previously noted meets these limitations in the instant claims. Applicants lastly argue that the reference gives no calculation from the values of the array measurements. In response the expression levels at each position are, in fact, calculated in the reference in order to give the values given in the various figures. Fluorescence, for example, as measured in the reference is only a form of light and cannot be an expression level without a calculation of some type. Claim 24 is anticipated in that a computer analysis of the array data generates data which is displayed such as given in Figure 5 on page 1678 of the reference.

The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this

Office action:

a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. § 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 C.F.R. § 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. § 103(f) or (g) prior art under 35 U.S.C. § 103(a).

Claims 11-23 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Lockhart et al. (Ref. A3).

This rejection is maintained as given in the previous office action, mailed 12/15/99, and as necessitated by amendment regarding claim 24. Applicants do not argue this rejection separately over the arguments which have been responded to already above as not being persuasive.

The disclosure is objected to because of the following informalities:

Applicants are requested to amend claim 10 to include a full name in parentheses after the abbreviation "READS".

Appropriate correction is required.

Claims 6 and 9 are allowed.

Applicants' amendment necessitated the new grounds of rejection. Accordingly, **THIS ACTION IS MADE FINAL.** See M.P.E.P. § 716.2(a). Applicants are reminded of the extension of time policy as set forth in 37 C.F.R. § 1.136(a).

A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS FINAL ACTION IS SET TO EXPIRE THREE MONTHS FROM THE DATE OF THIS ACTION. IN THE EVENT A FIRST RESPONSE IS FILED WITHIN TWO MONTHS OF THE MAILING DATE OF THIS FINAL ACTION AND THE ADVISORY ACTION IS NOT MAILED UNTIL AFTER THE END OF THE THREE-MONTH SHORTENED STATUTORY PERIOD, THEN THE SHORTENED STATUTORY PERIOD WILL EXPIRE ON THE DATE THE ADVISORY ACTION IS MAILED, AND ANY EXTENSION FEE PURSUANT TO 37 C.F.R. § 1.136(a) WILL BE CALCULATED FROM THE MAILING DATE OF THE ADVISORY ACTION. IN NO EVENT WILL THE STATUTORY PERIOD FOR RESPONSE EXPIRE LATER THAN SIX MONTHS FROM THE DATE OF THIS FINAL ACTION.

Papers related to this application may be submitted to Technical Center 1600 by facsimile transmission. Papers should be faxed to Technical Center 1600 via the PTO Fax Center located in Crystal Mall 1. The faxing of such papers must conform with the notices published in the Official Gazette, 1996 OG 30 (November 13, 1996), 1156 OG 61 (November 16, 1996), and 1157 OG 94 (December 23, 1996) (See 37 CFR § 1.6(d)). The CM1 Fax Center number is either (703) 308-4224, or (703) 308-3014.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ardin Marschel, Ph.D., whose telephone number is (703) 308-3894. The examiner can normally be reached on Monday-Friday from 8 A.M. to 4 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Woodward, can be reached on (703) 308-4128.

Any inquiry of a general nature or relating to the status of this application should be directed to the Technical Center receptionist whose telephone number is (703) 308-0196.

August 25, 2000

Ardin H. Marschel
ARDIN H. MARSCHEL
PRIMARY EXAMINER